

IV. CLAIM AMENDMENTS

1-17. (canceled)

18. (currently amended) A method for transmission of data packets in a packet-switched telecommunications system, the telecommunications protocol of which comprises a convergence protocol layer for converting user data packets into convergence protocol packets, and a link layer for transmitting convergence protocol packets as data units and for acknowledging the transmission, the method comprising the steps of:

defining a transmit data packet number, for the convergence protocol packets to be sent, by a counter in a transmitter;

transferring the convergence protocol packets to be sent to the link layer for transmission;

defining a receive data packet number, for received convergence protocol packets, by a counter in a receiver;

acknowledging the received convergence protocol packets;

adding the transmit data packet number ~~convergence protocol packet number~~ defined by the transmitter's counter to the convergence protocol packet to be sent in response to performance of a predetermined process of the telecommunications system; and

updating the value of the receiver's counter to correspond to said ~~convergence protocol~~ transmit data packet number.

19. (currently amended) A method according to claim 18, further comprising the steps of:

performing said adding of the transmit data packet number ~~convergence protocol packet number~~ to a convergence protocol packet to be sent in the link layer at predetermined intervals in response to the link layer being unable to guarantee acknowledged transmission of the convergence protocol packets;

comparing the value of the receiver's counter with the transmit data packet number ~~convergence protocol packet number~~ of the received convergence protocol packet; and

updating the value of the receiver's counter to correspond to said transmit data packet number ~~convergence protocol packet number~~ in response to the values being unequal.

20. (previously presented) A method according to claim 18, wherein said predetermined process of the telecommunications system is discard of a data packet or handover.

21. (currently amended) A method according to claim 18, further comprising
removing unacknowledged user data packets from ~~the~~ a buffer in response to the fact that the receiver sends an acknowledgement to the transmitter of reception of a convergence protocol packet

corresponding to the user data packet sent after the unacknowledged user data packets.

22. (currently amended) A method according to claim 18, further comprising the step of performing said adding of the transmit data packet number ~~convergence protocol packet number~~ defined by the transmitter's counter to the convergence protocol packet that is first in the transmitter's buffer in response to the fact that at least one unacknowledged user data packet has been removed from the transmitter's buffer, after the maximum value of retransmissions defined in the link layer has been exceeded.

23. (previously presented) A method according to claim 18, wherein said telecommunications system is a packet-switched mobile communication system, such as the UMTS or the GPRS system, which utilizes acknowledged transmission.

24. (previously presented) A method according to claim 23, wherein the method is applied in handover between the UMTS and the GPRS.

25. (previously presented) A method according to claim 23, wherein the method is applied in handover between radio network subsystems in the UMTS.

26. (currently amended) A packet-switched telecommunications system which comprises a terminal and a fixed network, which comprises a network element supporting packet-switched data transmission, data packets being arranged to be sent between the terminal and the network element in the telecommunications system and the telecommunications protocol of the telecommunications system comprising a convergence protocol layer for converting

user data packets into convergence protocol packets, and a link layer for transmitting convergence protocol packets as data units and for acknowledging the transmission, whereby in the transmission of data packets between the terminal and the network element the system is arranged to:

define, by means of a counter in a transmitter, a transmit data packet number for the convergence protocol packets to be sent,

transfer the convergence protocol packets to be sent to the link layer for transmission,

define, by means of a counter in a receiver, a receive data packet number for received convergence protocol packets,

acknowledge the received convergence protocol packets,

add the transmit data packet number ~~convergence protocol packet number~~ defined by the transmitter's counter to the ~~receive~~ convergence protocol packet to be sent in response to performance of a predetermined process of the telecommunications system, and

update the value of the receiver's counter to correspond to said transmit data packet number of the convergence protocol packet ~~number~~.

27. (currently amended) A telecommunications system according to claim 26, wherein the system is further arranged to:

add the transmit data packet number~~convergence protocol packet data number~~, defined by the transmitter's counter, to the convergence protocol packet to be sent at predetermined intervals, in response to the link layer being unable to guarantee acknowledged transmission of convergence protocol packets,

compare the value of the receiver's counter with the transmit data packet number~~convergence protocol packet number~~ of the received convergence protocol packet, and

update the value of the receiver's counter to correspond to said transmit data packet number~~convergence protocol packet number~~ in response to the values being unequal.

28. (previously presented) A telecommunications system according to claim 26, wherein said predetermined process of the telecommunications system is discard of a data packet or handover.

29. (currently amended) A telecommunications system according to claim 26, wherein the system is further arranged to remove unacknowledged user data packets from the a buffer in response to the fact that an acknowledgement is sent from the receiver to the transmitter of reception of a convergence protocol packet corresponding to the user data packet sent after the unacknowledged user data packets.

30. (previously presented) A telecommunications system according to claim 26, wherein said telecommunications system is a packet-

switched mobile communication system, such as the UMTS or the GPRS system, which utilizes acknowledged transmission.

31. (currently amended) A telecommunications system according to claim 30, wherein the system is further arranged to define, by means of the transmitter's counter, ~~the~~ a transmit data packet number convergence protocol packet number defined in one system in handover between ~~the~~ a UMTS and ~~the~~ a GPRS.

32. (currently amended) A telecommunications system according to claim 30, wherein the system is further arranged to define, by means of the transmitter's counter, ~~the~~ a transmit data packet number convergence protocol packet number in handover between radio network subsystems in the UMTS.

33. (currently amended) A network element for a packet-switched telecommunication system, said network element being arranged to transmit data packets to a terminal supporting a packet-switched data transmission, said network element comprising:

~~means of a first counter for~~ defining a transmit data packet number for the convergence protocol packets to be transmitted between the network element and the terminal;

means for transferring the convergence protocol packets to be transmitted to the link layer to be transmitted;

~~means of a second counter for~~ defining a data packet number for the received convergence protocol packets;

means for receiving acknowledgements of the received convergence protocol packets ~~form~~ from said terminal; and

means, responsive to performance of a predetermined process of the telecommunications system, for adding the transmit data packet number~~convergence protocol packet number~~, defined by the first counter, to the convergence protocol packet, to be sent to the terminal, ~~to update the value of the terminal's counter to correspond to said transmit convergence protocol packet number.~~

34. (currently amended) A network element as claimed in claim 33, wherein said means for adding the transmit data packet number~~convergence protocol packet number~~ are arranged to add the transmit data packet number~~convergence protocol packet data number~~, defined by the ~~second~~counter, to the convergence protocol packet to be sent at predetermined intervals in response to the link layer being unable to guarantee acknowledged transmission of convergence protocol packets.

35. (previously presented) A network element as claimed in claim 33, wherein said predetermined process of the telecommunications system is discard of a data packet or handover.

36. (previously presented) A network element as claimed in claim 33, further comprising means for removing unacknowledged user data packets from a buffer in response to the fact that an acknowledgement is sent from the receiver to the transmitter of reception of a convergence protocol packet corresponding to the user data packet sent after the unacknowledged user data packets.

37. (previously presented) A network element as claimed in claim 33, wherein the telecommunications system of said network element is a packet-switched mobile communication system, such as the

UMTS or the GPRS system, which utilizes acknowledged transmission.

38. (currently amended) A network element as claimed in claim 37, wherein the network element is further arranged to define, by means of a the counter, the transmit data packet number ~~convergence protocol packet number~~ in handover between the UMTS and the GPRS.

39. (currently amended) A network element as claimed in claim 37, wherein the network element is further arranged to define, by means of a the counter, the transmit data packet number ~~convergence protocol packet number~~ in handover between radio network subsystems in the UMTS.

40. (currently amended) A terminal for a packet-switched telecommunication system, said terminal being arranged to transmit data packets to a network element supporting a packet-switched data transmission, said terminal comprising:

~~means of a first counter~~ for defining a transmit data packet number for the convergence protocol packets to be transmitted between the terminal and the network element;

means for transferring the convergence protocol packets to be transmitted to the link layer to be transmitted;

~~means of a second counter~~ for defining a data packet number for the received convergence protocol packets;

means for receiving acknowledgements of the received convergence protocol packets from said network element; and

means, responsive to performance of a predetermined process of the telecommunications system, for adding the transmit data packet number convergence protocol packet number, defined by the ~~first~~ counter, to the convergence protocol packet to be sent to the network element. ~~For updating of the value of the second counter to correspond to said transmit convergence protocol packet number.~~

41. (currently amended) A terminal as claimed in claim 40, wherein said means for adding the transmit data packet number convergence protocol packet number are arranged to add the transmit data packet number, defined by the counter, to a convergence protocol packet ~~data number defined by the second counter to the convergence protocol packet~~ to be sent at predetermined intervals in response to the link layer being unable to guarantee acknowledged transmission of convergence protocol packets.

42. (previously presented) A terminal as claimed in claim 40, wherein said predetermined process of the telecommunications system is discard of a data packet or handover.

43. (previously presented) A terminal as claimed in claim 40, further comprising means for removing unacknowledged user data packets from a buffer in response to the fact that an acknowledgement is sent from the receiver to the transmitter of reception of a convergence protocol packet corresponding to the user data packet sent after the unacknowledged user data packets.

44. (previously presented) A terminal as claimed in claim 40, wherein the terminal supports a packet-switched mobile

communication system, such as the UMTS or the GPRS system, which utilizes acknowledged transmission.

45. (currently amended) A terminal as claimed in claim 44, wherein the terminal is further arranged to define, by means of a the counter, the transmit data packet number convergence protocol ~~packet number~~ in handover between the UMTS and the GPRS.

46. (currently amended) A terminal as claimed in claim 44, wherein the terminal is further arranged to define, by means of the ~~first~~ counter, the transmit data packet number convergence ~~protocol packet number~~ in handover between radio network subsystems in the UMTS.

47. (new) A network element as claimed in claim 33, wherein said network element is arranged to send the convergence protocol packet and its transmit data packet number to the terminal for updating the value of the terminal's counter to correspond to said transmit data packet number.

48. (new) A terminal as claimed in claim 41, wherein said terminal is arranged to send the convergence protocol packet and its transmit data packet number to the network element for updating the value of a network element's counter to correspond to said transmit data packet number.